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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/111,803	07/08/1998	HIDEO FUKUCHI	JAO-40854	6225

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EXAMINER	
CHUNG, DANIEL J	

ART UNIT	PAPER NUMBER
2672	41

DATE MAILED: 12/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/111,803	FUKUCHI, HIDEO	
	Examiner	Art Unit	
	Daniel J Chung	2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3 and 5-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 5-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claims 1-3 and 5-33 are presented for examination. This office action is in response to the RCE filed on 10-23-2003 and supplemental amendment filed on 9-25-2003

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on January 28, 1997. It is noted, however, that applicant has not filed a certified copy of the Priority application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsumura (5,936,545), Kawasaki et al (4,246,578) and Ying et al (4,057,849), and in view of Rossmann (6,147,670), and further in view of Matthews et al (5,677,708)

Regarding claim 1, Tsumura discloses that the claimed feature of a telecommunication device ["radio pager"], comprising: a display unit ["display section"; 10] that displays information [i.e. "character data" in 7]: (See Fig 1) display control

["display control section"; 9] means for controlling a display operation of said display unit [10]: and an operating unit ["control section"; 5] that designates a display operation of said display unit, and displaying the plurality of lines of characters of said information on said display unit (See Fig 3-4), and said display control means controlling the display operation of said display unit so that a spacing between the characters is constant. (See Fig 3D, Fig 4B, Fig 5B) wherein the display unit, the display control means, the operating unit and the informing means are integrated into the telecommunication device and the telecommunication device is wearable on the user. ["radio-paging receiver", which could be wearable on user's belt or wrist. I.e. 'pager'] (See Abstract, Fig 1, Fig 3, Fig 4, col 1 line 54-col 2 line 54)

Tsumura does not specifically discloses that "a font having a width that varies according to the type of character displayed." However, Kawasaki et al clearly discloses that a pattern generation display system with a font having a different width value based on the type of character displayed. (See Fig 2, col 2 line 64-col 3 line 32) It would have been obvious to one skilled in the art to incorporate the teaching of Kawasaki into the teaching of Tsumura, in order to provide "good perception of a word", "easier recognition of words" (See col 3 line 16-17, col 3 line 23-24 in Kawasaki), as such improvement is also advantageously desirable in the teaching of Tsumura for "realizing an optimum display pattern satisfying both of two essential requirements (i.e. handiness and ***visibility***) in the radio-paging receiver." (See col 2 line 14-16 in Tsumura)

Tsumura does not explicitly disclose that "a display control means that causes a new line of characters to be started wherever it would otherwise be required to break the word across two lines of characters of information". However, Ying et al discloses the claimed feature of invention. (See col 2 line 16-37) The motivation would have been to avoid the confusion created by breaking a word in two separate lines in improved display system. Therefore, it would have been obvious to one skilled in the art to incorporate the teaching of Ying et al into the teaching of Tsumura for "realizing an optimum display pattern satisfying both of two essential requirements (i.e. handiness and ***visibility***) in the radio-paging receiver." (See col 2 line 14-16 in Tsumura)

Tsumura does not specifically disclose that "automatically forming a vertical scrolling display, the scrolling display incrementally displaying one or more rows of dots sufficient to display the font." However, such limitation is shown in the teaching of Rossmann. (See Fig 1A-1D, Fig 3A-3D, Fig 5A-B, col 1 line 31-61, col 2 line 13-19) The motivation would have been to provide the convenient way to see next unrevealed information for user. Also, the function of automatic scrolling will advantageously save the time and cost by eliminating the step of user' s operations such as moving the mouse and pressing the button, as it will allow the user to see next unrevealed information without any delay. Therefore, it would have been obvious to one skilled in the art to incorporate "the automatic vertical scrolling display" of the teaching in Rossmann into the teaching of Tsumura, as such improvement is also advantageously

desirable in the teaching of Tsumura for "realizing an optimum display pattern satisfying both of two essential requirements (i.e. ***handiness*** and visibility) in the radio-paging receiver." (See col 2 line 14-16 in Tsumura)

Also, Tsumura does not explicitly discloses that "means for informing to a user when information to be displayed exceeds the number of lines displayable on display unit in one frame". However, such limitation is shown in the teaching of Matthews ["arrow tab"; 162,164,195-198] (See Abstract, Fig 5- Fig 11, col 3 line 60-col 4 line 17, col 14 line 41-col 15 line 4) It would have been obvious to one skilled in the art to include "arrow tab" of Matthews into the teaching of Tsumura, in order to effectively "provide the user with an instinctive indication that additional items exist beyond those displayed in the control object" (See col 4 line 60-63 in Matthews), as such improvement is also advantageously desirable in the teaching of Tsumura for "realizing an optimum display pattern satisfying both of two essential requirements (i.e. ***handiness*** and visibility) in the radio-paging receiver." (See col 2 line 14-16 in Tsumura), thereby displaying maximum display contents within limited display area with optimized manner. Furthermore, implementing a scroll bar, when display content exceed the size limitation of display unit, is well known in the art. As to the on-line dictionary, scroll bar is defined as "in some graphical user interfaces, a vertical or horizontal bar at the side or bottom of a display area that can be used with a mouse for moving around in that area". Therefore, it would have been obvious to one skilled in the art to automatically show a

"scroll bar" whenever the size of content information is larger than the size of display device.

Regarding claim 2, refer to the discussion for the claim 1 hereinabove, Ying et al further discloses that display control means causing a new line of characters to be started whenever it would otherwise be required to break a word across two of said lines of characters. (See col 2 line 16-37)

Regarding claim 3, refer to the discussion for the claim 1 hereinabove, Tsumura discloses that the claimed feature of an information display apparatus, comprising: a display unit [10] that displays information [i.e. "character data"]; display control [9] means for controlling a display operation of said display unit; an operating unit [5] that designates a display operation of said display unit, said display control means causing said display unit to form a fixed display when an amount of information to be displayed is not greater than a number of lines displayable on said display unit in one frame (See Abstract, Fig 3-4); display control means causing said display unit to automatically form a vertical scrolling display when an amount of information to be displayed exceeds a number of lines displayable on said display unit in one frame, the operation of automatically forming a scrolling display a plurality of times continuously being provided by virtue of automatic operation of the display control means and operating unit without manual operation of a user, the scrolling display incrementally displaying one or more

rows of dots sufficient to display a font; (See Fig 1A-1D, Fig 3A-3D, Fig 5A-B, col 1 line 31-61, col 2 line 13-19 in Rossmann) and means for informing to a user when information to be displayed exceeds the number of lines displayable on display unit in one frame, wherein the display unit, the display control means, the operating unit and the informing means are integrated into the telecommunication device and the telecommunication device is wearable on the user [i.e. Radio-paging receiver]. (See Abstract, Fig 1, Fig 3, Fig 4, col 1 line 54-col 2 line 54)

Regarding claim 5, refer to the discussion for claim 4 hereinabove, Rossmann discloses that display control means changing a scroll speed for forming the scrolling display in accordance with an operation performed on said operating unit. (See Abstract, Fig 1A-1D, Fig 3A-3D, Fig 5A-B, col 2 line 13-19)

Regarding claim 6, refer to the discussion for claim 4 hereinabove, Rossmann discloses that display control means changing the scroll speed in accordance with an operation externally performed on said operating unit, the operation providing an instruction to change a predetermined scroll speed determined at the start of the scrolling display. (See Abstract, Fig 1-7, col 1 line 10-40, col 3 line 31-39)

Regarding claim 7, refer to the discussion for claim 4 hereinabove, Rossmann discloses that display control means presetting the scroll speed determined at the start

of the scrolling display by operation of a switch button on said operating unit. (See Abstract, Fig 1-7, col 1 line 10-40, col 3 line 31-39)

Regarding claim 8, refer to the discussion for claim 4 hereinabove, Rossmann discloses that display control means causing said display unit to form [a demonstration display] at a currently set scroll speed, the scroll speed being determined at the start of the scrolling display by said operating unit. (See Abstract, Fig 1-7, col 1 line 10-40, col 3 line 31-39)

Rossmann does not explicitly disclose that " demonstration display at a currently set scroll speed." However, it would have been obvious to one having ordinary skill in the art at the time of Applicant 's invention, because using a demonstration display will advantageously allow the user to set the scrolling speed with easy manner.

Regarding claim 9, claim 9 is equivalent to claim 3 and thus the rejection to claim 3 hereinabove is also applicable to claim 9.

Regarding claim 10, Tsumura discloses that display control means causing said display unit to display information formed of a group of characters vertically or horizontally over a plurality of lines. (See Abstract, Fig 3-4)

Regarding claims 11-14, claims 11-14 are respectively equivalent to claims 5-8, and thus the rejections to claims 5-8 hereinabove are also respectively applicable to claims 11-14, but applied in view of the rejections to base claim 9.

Regarding claims 15, Tsumura discloses that a communication circuit ["radio pager"] that receives information, the information received via said communication circuit being displayed on said display unit in response to said display control means. (See Abstract, Fig 1)

Regarding claim 16, claim 16 is equivalent to claim 15, and thus the rejection to claim 15 hereinabove is also applicable to claim 16, but applied in view of the rejection to base claim 9.

Regarding claims 17 and 18, claims 17 and 18 are equivalent to claim 3, and thus the rejection to claim 3 hereinabove is also applicable to claims17 and 18, but applied in view of the rejection to base claims 15 and 16.

Regarding claim 19, refer to the discussion for claim 1 hereinabove, Tsumura discloses that an antenna unit [1] for receiving a signal via said communication circuit. (See Fig1)

Regarding claim 20, claim 20 is equivalent to claim 19, and thus the rejection to claim 19 hereinabove is also applicable to claim 20, but applied in view of the rejection to base claim 16.

Regarding claim 21, refer to the discussion for claim 1 hereinabove, Tsumura discloses that communication circuit receiving an individually selective calling signal or a message via said antenna unit. (See Fig1)

Regarding claim 22, claim 22 is equivalent to claim 21, and thus the rejection to claim 21 hereinabove is also applicable to claim 22, but applied in view of the rejection to base claim 20.

Regarding claim 23, Tsumura discloses that display control means comprising at least one of a processing unit [5] and a storage device [7]. (See Fig1)

Regarding claim 24, Tsumura discloses that processing unit comprising at least one of a switching monitor section and a message determining section. (See Abstract, Fig 1, Fig 3-4)

Regarding claim 25, Tsumura discloses that storage device [7] storing a plurality of fonts. (See Fig1)

Regarding claims 26-28, claims 26-28 are respectively equivalent to claims 23-25, and thus the rejections to claims 23-25 hereinabove are also respectively applicable to claims 26-28, but applied in view of the rejections to base claim 3.

Regarding claims 29-32, claims 29-32 are similar in scope to the claims 1 and 3, and thus the rejections to claims 1 and 3 hereinabove are also applicable to claim 29-32.

Regarding claim 33, refer to the discussion for the claim 1 hereinabove, Kawasaki et al further discloses that display control means displaying the plurality of lines of characters of said information on said display unit in a font having a width that varies according to the type of character displayed, and said display control means controlling the display operation of said display unit so that a spacing between the character is constant. (See Fig 2, col 2 line 64-col 3 line 32)

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Chung whose telephone number is (703) 306-3419. He can normally be reached Monday-Thursday and alternate Fridays from 7:30am- 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael, Razavi, can be reached at (703) 305-4713.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

djc
November 12, 2003

MICHAEL RAZAVI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600